

MARSHALL STAR

Marshall Space Flight Center

August 5, 1999

"We bring people to space — We bring space to people"

Marshall employees, contractors receive awards at Honors Day ceremonies

See complete awards coverage on pages 3-8

More than 200 civil service and contractor employees who have made exceptional contributions to the nation's space program were recognized at Marshall's annual honor ceremonies Tuesday.

Associate Administrator for Space Flight Joseph H. Rothenberg from NASA Headquarters in Washington, D.C., along with Center Director Art Stephenson, presented 242 awards in 14 categories.

Agency Honor Awards included Exceptional Service Medals, Exceptional Achievement Medals, NASA Group Achievement Awards and one Public Service Medal. Center Deputy Director Carolyn S. Griner received NASA's highest honor — the Distinguished Service Medal — at earlier ceremonies in Washington, D.C.

Marshall Center Honor Awards included Patent Awards, Software of the Year Awards, Inventor of the Year Awards, Technology Transfer Awards, Research and Technology Awards, Marshall Group Achievement Awards, NASA Certificates of Appreciation, Director's Commendation Certificates and Marshall Certificates of Appreciation.



Portrait unveiled

NASA Associate Administrator for Space Flight Joseph Rothenberg, right, after a portrait of Marshall Center Director Art Stephenson, center, was unveiled during the annual Honors Day Awards Ceremonies held Tuesday. "The work that we do here today is not about today, or about the accomplishments from the past ... It's really about what the promise of the future is," Rothenberg said during the ceremony.

Civil service buyout plan approved

The buyout plan recently submitted to NASA Head-quarters has been approved.

The buyout period opened Tuesday and closes on Dec. 31. The official notice and various attachments are being distributed to all employees.

For more information, call Edwina Bressette at 544-8115.

Fourth Chandra engine firing successful

A five-minute firing of the Integral Propulsion System aboard the Marshall-managed Chandra X-ray Observatory was successfully completed Wednesday afternoon, Aug. 4, raising the perigee, or low point, of the observatory's orbit by an estimated 1,373 miles (2,210 kilometers).

Controllers at the Chandra Operations Control Center in Cambridge, Mass., commanded the observatory's engines to ignite at 12:36 p.m. EDT Wednesday. The burn which raised Chandra's perigee to an estimated 3,535 miles (5,689 kilometers), left the observatory's apogee, or high point, essentially unchanged at 86,448 miles (139,125 kilometers).

"Initial indications are that today's firing went very well," said Fred Wojtalik, Chandra program manager at Marshall. "Our next firing is planned for Saturday, and will be an approximately six-minute burn to further raise Chandra's perigee."

Meanwhile, the Chandra control team continues to step through activation and checkout of observatory systems and instruments. "We are extremely pleased with the performance of Chandra and the way activation is progressing," said Wojtalik.

"Safety Can't Wait"

— Safety slogan submitted by **Pravin K. Aggarwal, ED22**

Rep. Cramer discusses NASA budget cuts

Editor's Note: The following are comments made by Rep. Bud Cramer of Huntsville about the recently announced NASA budget cuts.

I wanted to give you the opportunity to hear from me a more complete explanation about the way we've wound up here in this NASA cut that I believe we will only have to temporarily endure. Of course I'd rather be there in person but I'm up here in Washington staring down the last stages of this appropriations cycle. I'm coming to you somewhat informally even though it's through this technology.

I've been your representative for nine years now; I'm in my fifth term. Ever since the day I got here, I've hit the ground running on NASA and Marshall issues. I've worked hard to build a coalition so that we have a NASA support group to win the battles we need to win. We've fought in 12 space station battles — and we've won them all. One came a little closer than I would have liked, but the other 11 were big wins that we won with considerable margins.

More than two years ago I went to the Appropriations Committee, and this year I went to the subcommittee on VA/HUD and Independent Agencies that unfortunately gave NASA the bad budget cut on July 26 which at that time was \$1.4 billion. However, as early as April or May we could foresee that the end game of this budget process was going to be bad news for NASA. The chairman of the committee, Rep. Walsh, warned me that

because the NASA bill falls last in the cycle, because there were going to be budget issues not settled, because the tax cut issue would also not be settled, this bill and two other bills would receive bad marks. We were warned they would be devastating marks but that the end game would be reconciliation at the end of the year. We foresaw temporary bad news.

We got the bad news on July 26 in subcommittee when we heard about the \$1.4 billion cut. We took it to full committee at the end of the week and were able to restore \$400 million of the \$1.4 billion bringing the cut down to \$1 billion, still an absolutely intolerable level of cuts.

See Budget on page 10

Marshall Values

Dedication, hard work by people accomplishes Marshall's mission, goals

Editor's note: This is the first in a five-part series addressing Marshall's core values.

The Marshall team is committed to five core values: People, Customers, Excellence, Teamwork and Innovation. These values serve as the principles that guide our decisions and behaviors. This week the Star looks at the value of people. Charles Scales, director of Marshall's Equal Opportunity Office, discusses how the values were selected and why "people" is at the top of the list.

PEOPLE:

- We recognize that the people who work here are "most important" and are our greatest strength.
 - We create a safe and healthy environment.
- We encourage balance between personal and professional life.
 - We enable personal and professional growth.
- We commit ourselves to the highest standards of integrity and ethical behavior.
 - We reward and celebrate our accomplishments.
- We recognize individual and cultural differences and treat each other with dignity and respect.

"These values are the result of input from employees throughout the Center," said Scales, who chaired a small group of employees tasked with bringing the Marshall values into focus. "We looked at existing Center policies and procedures like safety and ISO 9000 policies, information from the Project LIGHT initiative, and NASA and Center mission and goals. Looking at all of those documents, the five values we selected became obvious.

"Our mission and goals can only be accomplished by the dedication and hard work of our people," Scales said. "Creating a safe and healthy environment is a key component of this value. The safety of people, equipment and property must always be the first consideration in our decision-making process."

Valuing people means creating an environment that encourages balance between personal and professional life. It means being accountable to our customers, meeting our commitments, supporting our team members, and being innovative and creative.

"As a people-oriented organization, we must also provide the tools and training necessary to enable professional growth," Scales said. "While it's important that we accomplish our mission and goals on schedule and within budget, it's just as important how we do it. That's why a key component of our people value is a commitment to the highest standards of integrity and ethical behavior. At the end of the day, it's important to look back and say we did it right both technically and ethically.

"Valuing people also means recognizing the individual and cultural differences of Marshall's diverse workforce," Scales said. "Striving for diversity in our workforce is not only the right thing to do, it also gives us a competitive advantage because we will get diverse ideas. Of course, having — as part of our people value — a commitment to reward and celebrate our accomplishments is a fun way to highlight our successes."



Annual Honors Day Awards Ceremonies

Center director praises employees' accomplishments

We honor the Marshall Space Flight Center spirit of excellence as evidenced by this distinguished group of recipients. Their achievements bring honor to the Center, their families and co-workers. Over the last year, the Marshall Center recipients, including employees and contractors, continued NASA's march toward a new millennium of space exploration that will enhance the quality of life for our friends and our nation. We commend them for their perseverance, dedication, commitment to safety and plain hard work. They remained firmly focused on the future even in the midst of change.

The recipients demonstrated excellence in technical, administrative and managerial assignments. Their work reflected the Marshall Center's dedication to its assigned responsibilities as NASA's leader in Space Transportation Systems Development and as the Center of Excellence for Space Propulsion. For example, hardware delivery started for the X-33 technology demonstrator vehicle. The X-34, with the Marshall-developed Fastrac engine, also met key milestones. These efforts continued to provide significant technology information to aid U.S. industry in building a full-scale Reusable Launch Vehicle. In line with our commitment to safety. increased reliability and reduced costs, we witnessed the first flight of the Super Lightweight Tank and the Shuttle Main Engine Block IIA configuration. Our leadership in Microgravity Research continued broad, productive Earth-based and space-based research including a new treatment for influenza, developed with the aid of space-grown crystals. We also explored improvements in plant growth Light Emitting Diodes by Quantum Devices to help advance photodynamic cancer therapy. Our Space Optics Manufacturing Technology team designed, developed and tested numerous optical systems and technologies to help us better view and understand our universe. We eagerly await the discoveries Chandra will make. Along with Unity, the U.S. Laboratory and the Airlock Module, were built by Boeing in Marshall facilities in support of the International Space Station effort. The ISS holds untold promises for the future of space exploration.

The last 12 months illustrate the dedication and commitment shown by every member of the Marshall team. We express special appreciation to our recipients for bringing people to space and space to people in new and extraordinary ways.

—Art Stephenson, Center Director

NASA Distinguished Service Medal

The Distinguished Service
Medal is the highest honor that
NASA confers to a Government
employee. The award is granted
only to employees who, by distinguished service, ability or courage,
have personally made a contribution
representing substantial progress to
the NASA mission in the interest of
the United States and are so
extraordinary that the other forms of
recognition by NASA would be
inadequate.



Carolyn S. Griner Center Deputy Director



Victor K. Henson Space Shuttle Projects Office, retired



Robert J. Schwinghamer Office of the Director, retired

NASA Exceptional Service Medal

The Exceptional Service Medal is awarded for significant, sustained performance characterized by unusual initiative or creative ability that clearly demonstrates substantial improvements or contributions in engineering, aeronautics, space flight, administration, support or space-related endeavors that contribute

to the mission of NASA.



James L. Cannon Space Transportation Directorate



Omana G. Cawthon Office of Chief Financial Officer

See Awards on page 4

August 5, 1999 MARSHALL STAR

Awards -

Continued from page 3



Wendell R. Colberg Engineering Directorate



Jonathan M. Darden Space Transportation Directorate



Joe B. Davis Engineering Directorate



Howard D. Hall Engineering Directorate (posthumously)



Lisa H. Hediger Engineering Directorate



Lisa R. Hughes Office of Chief Counsel



Gene Leckie Information Systems Service Office, retired



Judy D. Martin Employee & Organizational Development Dept., retired



Walter S. Melton III Procurement Office



Billy H. Nerren Engineering Directorate, retired



Nelson C. Parker Engineering Directorate



Robert W. Parks Program Development Directorate, retired



Fred D. Roe Jr. Engineering Directorate



Richard G. Schunk Engineering Directorate



Thomas N. Stinson Science Directorate



Joyce E. Turner-Waits Center Operations Directorate



Shelby N. Weathers Safety & Mission Assurance Office

NASA Exceptional Achievement Medal

The Exceptional Achievement Medal is awarded for significant, specific accomplishments or contributions clearly characterized by substantial and significant improvements in operations, efficiency, service, financial savings, science, or technology that contribute to the mission of NASA.



Sherwood H. Anderson Science Directorate

See Awards on page 5

Awards -

Continued from page 4



Darrell G. Bailey Flight Projects Directorate Procurement Office



Gary D. Bugbee



Susan L. Cloud **Customer and Employee Relations Directorate**



Stephen A. Cook **Space Transportation** Directorate



Scott D. Croomes **Flight Projects Directorate**



Office Maninderpal S. Gill Engineering Directorate



Benjamin E. Goldberg **Space Shuttle Projects**



Victor B. Hamrick Flight Projects Directorate



Peter A. Curreri **Science Directorate**



Darrell W. Davis Engineering Directorate



Jack C. Reily Jr. Science Directorate



Byron B. Rouse **Center Operations** Directorate



Michael U. Rudolphi **Space Shuttle Projects Office**



Charles L. Johnson **Space Transportation** Directorate



Paul M. Munafo **Engineering Directorate**



Harry F. Schramm Jr. **Customer and Employee Relations Directorate**



Karen L. Spanyer **Engineering Directorate**



Jackie D. Steadman Flight Projects Directorate See Awards on page 6

See Marshall Honors Wall in the lobby of Bldg. 4200

August 5, 1999 **MARSHALL STAR**

Awards

Continued from page 5



Cynthia D. Stemple Science Directorate

Not pictured:



Gregory R. Swanson Engineering Directorate



Glynda S. Thomas Office of the Director



Be Trieu Space Transportation Directorate



James M. Zwiener Engineering Directorate, retired

NASA Public Service Medal

The Public Service Medal is awarded to individuals who were not Government employees during the period in which the service was performed. The award is granted for exceptional contributions to the mission of NASA.

Helen L. Thomas

Engineering Directorate

Not pictured: Neil W. Haars Sverdrup

NASA Group Achievement Award

- Advanced Transportation System Program Environmental Support Team
- Automated Rendezvous and Capture Video Guidance Sensor Flight Experiment Team
- Lightning Imaging Sensor Team
- Marshall Aerospace Vehicle Representation in C Simulation Team
- MSFC Co-Collaborative Agreements Team
- MSFC Commercialization Assistance Team
- MSFC International Space Station Independent Assessment Team
- MSFC International Space Station Assembly Initiation Team
- MSL-1 Debris Fact-Finding Team
- NASA Middeck Glovebox Team
- NASA/Mir Phase 1 Microgravity Science Team
- NASA Space Environments and Effects Team
- United States Microgravity Payload-4 Mission Team

Awards External to NASA

EEO Update's EEO/HR Best Practices Award (Runner up)

Equal Opportunity Office/Human Resources Department

Space Flight Awareness Flight Safety Award Fayssal M. Safie, Safety and Mission Assurance Office

Huntsville Area Committee on Employment of People with Disabilities Humanitarian Award William P. Dobbs III, Center Operations Directorate NSBE Golden Torch Awards Lifetime Achievement in Government Award

Gloria A. Hullett-Smith, Flight Projects Directorate

NASA Certificate of Appreciation

Lisa B. Adkins, Center Operations Directorate

Brenda K. Bailey, Engineering Directorate Julie A. Bassler, Science Directorate Brian E. Blair, Engineering Directorate James F. Blanche, Engineering Directorate Mary Chamblee, Raytheon Support Services Company

Roger P. Chassay Jr., Science Directorate Dennon J. Clardy, Engineering Directorate Dawn R. Cross, Engineering Directorate Thomas S. Dollman, Customer and Employee Relations Directorate

Steven W. Evans, Engineering Directorate Douglas E. Fox, Engineering Directorate Lynn H. Grisham, Office of Chief Financial Officer David C. Harris, Space Transportation Directorate Michael W. Haynes, Center Operations Directorate Roslin Hicks, Science Directorate John H. Howell, Office of Chief Financial Officer

Mellina R. Hudgins, Procurement Office Sonya L. Hutchinson, Engineering Directorate Mark E. Hyder, Center Operations Directorate Jimmie E. Johnson, Flight Projects Directorate Emory E. Lynn, Space Transportation Directorate Roy W. Malone Jr., Center Operations Directorate Robert O. McBrayer, Safety and Mission Assurance

Gary S. McGriff, Engineering Directorate Donald L. Miller, Safety and Mission Assurance Office

Rondal C. Mize, Safety and Mission Assurance Office

Marcus S. Osborne, Chandra X-ray Observatory Office

John N. Pea, Space Shuttle Projects Office John A. Puett, Center Operations Directorate Patricia R. Schultz, Customer and Employee Relations Directorate

James D. Sledd, Engineering Directorate
Jeffrey L. Spencer, Space Shuttle Projects Office
Russell L. Stone, Engineering Directorate
Margaret C. Stroud, Engineering Directorate
Frank P. Thomas, Engineering Directorate
Annette K. Tingle, Center Operations Directorate
Kenneth Vadasy, Engineering Directorate
Gabriel R. Wallace, Engineering Directorate
Caroline K. Wang, Center Operations Directorate
Richard T. Wegrich, Engineering Directorate
Amanda J. Wilson, Center Operations Directorate
Warren Woods, Safety and Mission Assurance Office
Robert G. Zagrodzky, Engineering Directorate

MSFC Director's Commendation Award

Warren A. Adams Jr., Space Transportation Directorate

Gloria J. Ayers, Office of Chief Financial Officer Richard C. Brunell Jr., Center Operations Directorate

Sharon E. Carswell, Space Transportation Directorate

Donald L. Carter, Flight Projects Directorate Judy S. Chapman, Space Shuttle Projects Office Cynthia A. Coker, Science Directorate Michael Coussons, Sverdrup

Stephan R. Davis, Space Transportation Directorate Carol E. Dexter, Space Transportation Directorate Kenneth R. Fernandez, Space Transportation Directorate

Tony R. Fiorucci, Space Transportation Directorate Cindy Fortenberry, Sverdrup

James M. Holt, Engineering Directorate Thomas W. Inman, Flight Projects Directorate Edwin R. Jones, Center Operations Directorate Michael A. Kahn, Cordant Technologies

Rachel R. Kamenetzky, Engineering Directorate Kathy O. Kappus, Engineering Directorate Robert H. Kirchmyer, Space Transportation

James C. Knox, Flight Projects Directorate
Robert E. Lake Jr., Space Transportation Directorate
Robert C. Lambdin, Engineering Directorate

Joe L. Leopard, Space Transportation Directorate David F. Mann, Flight Projects Directorate Michael A. Martin, Space Transportation Directorate

Marena M. McClure, Procurement Office Matthew B. McCollum, Engineering Directorate

Nancy G. McNeill, Space Transportation Directorate

David R. Mercier, Space Transportation Directorate Roger K. Parisa, Center Operations Directorate

Roger K. Parisa, Center Operations Directorate
James W. Parker, Engineering Directorate

Jonathan Q. Pettus, Center Operations Directorate John Popescu, Office of Chief Counsel Emil L. Posey, Procurement Office

Brian E. Pung, Space Shuttle Projects Office John W. Redmon Jr., Science Directorate Glen A. Robertson, Space Transportation Director-

Michelle P. Schneider, Flight Projects Directorate Andrew A. Schorr, Space Shuttle Projects Office Elizabeth C. Shelton, Space Transportation Directorate

See Awards on page 7

Awards

Continued from page 6

Susan H. Spencer, Space Transportation Directorate

Cynthia D. Stemple, Science Directorate Diep V. Trinh, Engineering Directorate Jason A. Vaughn, Engineering Directorate Toan T. Vu, Systems Management Office Ketela K. White, Procurement Office James E. Wyckoff, Center Operations Directorate

MSFC Certificate of Appreciation

Amy Alvis, AZ Technology
Sherman L. Avans, Space Shuttle Projects Office
Jerry J. Baldwin, Engineering Directorate
John A. Busbey, Procurement Office
Kenneth S. Clifton, Engineering Directorate
Helen Cole, Science Directorate
William P. Dobbs, Center Operations Directorate
Susan V. Elrod, Space Transportation Directorate
Dwight D. Goodman, Science Directorate
Charles W. Griffith, Science Directorate
Jack D. Gross, Safety and Mission Assurance
Office, retired
Sandra W. Hall, Procurement Office

Sandra W. Hall, Procurement Office Nadra T. Hatchett, Engineering Directorate Amelia S. Hemken, Engineering Directorate Phillip M. Henderson, Center Operations Directorate

John E. Hengel, Space Transportation Directorate Bobby J. Holden, Procurement Office Clementine Holmes, Boeing North American Vickie J. Ivey, Procurement Office Owen H. Johnson, Center Operations Directorate Steve Jones, AZ Technology Paul A. Kennedy, Engineering Directorate

L. Elaine Kuespert, Procurement Office
George M. LaCoe, Flight Projects Directorate
Michael H. Lee, Space Transportation Directorate
William D. Lightsey, Science Directorate
Richard Mell, AZ Technology
Daniel P. Mellen, Engineering Directorate

Billy W. Millwood, Space Transportation Directorate

Michael J. Milsted, Space Transportation Directorate

Jamie P. Narrell, Procurement Office Andrew J. Nichols, Space Transportation Directorate

Jay F. Onken, Flight Projects Directorate Tina M. Palacios-LaBair, Space Transportation Directorate

Rhonda W. Pepper, Space Transportation Directorate

Joseph L. Pirani, Center Operations Directorate Jim K. Russell, Space Transportation Directorate Terri L. Schmitt, Space Transportation Directorate

Walter E. Stephens, Space Transportation Directorate

Gerald A. Wheeler, Space Transportation Directorate

Patrick A. Whipps, Space Shuttle Projects Office Lewis Wooten, Flight Projects Directorate

MSFC Group Achievement Award

- Advanced X-ray Astrophysics Facility Project Astrionics Team
- Atlas III Propulsion Module Team
- AXAF Thermal Vacuum Test Team
- Fastrac Team
- Human Resources Department Reorganization Implementation Team
- IDEAS Advisory Committee Team
- Initial Data Management Concepts and

Operations Procedures Team

- Lightning Mapper Sensor Team
- Marshall-on-the-Move Conference Team
- MSFC Move Team
- MSFC Suppliers Street Market Team
- NASA/Mir Integration Team
- Opto-Mechanical Design Team
- Outsourcing Desktop Initiative for NASA Team

Rocket Based Combined Cycle Team Solid Rocket Booster Parts Kitting La

- Solid Rocket Booster Parts Kitting Launch Flow Enhancement Team
- Space Environments and Effects Team
- X-33 Analysis Review Team
- X-33 Helium Pressurization Bottle Certification Testing Team

MSFC Research and Technology Award

Marshall's Research and Technology Award recognizes notable achievements in current technology development.



Jerry K. Owens Engineering Directorate



Anthony M. Springer Structures and Dynamics Laboratory, S&E



Donald L. Harris Engineering Directorate



Pablo D. Torres Engineering Directorate



Brett H. Smith Engineering Directorate

Not pictured: Merlin D. Danford, Engineering Directorate, retired Mitchell J. Mendrek, Engineering Directorate, retired Brian E. Hurless, IIT Research Institute Mark A. Benzie, Engineering Directorate, resigned

MSFC Technology Transfer Award

Marshall's Technology Transfer Award recognizes excellence in applying NASA technology to commercial uses.

Not pictured:

Robert Lightfoot, Stennis Space Center X-ray Calibration Facility Test Team



Johnnie J. Clark Engineering Directorate

See **Awards** on page 8

Awards

Continued from page 7



Kenneth G. Cooper Engineering Directorate

MSFC Inventor of the Year Award



Curtis W. Manning Engineering Directorate

Marshall's Inventor of the Year Award recognizes employees with patented inventions that have realized their commercial potential or have contributed significantly to specific NASA programs.



David E. Howard Engineering Directorate

MSFC Software of the Year Award

Marshall's Software of the Year Award was awarded to authors of software developed and owned by NASA.

Not pictured:

John C. Mankins, NASA Headquarters Ginger Demerjian, University of Alabama in Huntsville Keith Crowe, University of Alabama in Huntsville Homer Carlisle, Auburn University James Atherton, SAIC



Ronald L. Newby Engineering Directorate



Joseph L. Butler Engineering Directorate



Kevin J. Baker Space Transportation Directorate



W. Neill Myers Space Transportation Directorate



Michael D. Shadoan Space Transportation Directorate



Everett L. Foy Jr. Engineering Directorate, retired



Daniel A. O'Neil Flight Projects Directorate



John C. Forbes Space Transportation Directorate



John E. Hengel Space Transportation Directorate



Darron C. Rice Space Transportation Directorate

MSFC Patent Award

Marshall's Patent Award recognized NASA employees winning patents in the previous calendar year.

Not pictured:

Daniel C. Carter
Science Directorate, resigned

Minority institutions team with Marshall to conduct NASA education, research projects

by Sherrie Super

Ten faculty and student teams from six minority universities recently were awarded Partnership Awards to conduct education and research projects with Marshall.

Partnership Awards are designed to foster cooperation between NASA employees and faculty and students at historically Black colleges, Hispanic serving institutions and Tribal colleges and universities.

The university teams collaborate with Marshall employees onsite at Marshall and the universities, said Willie Love, assistant director of Marshall's Equal Opportunity Office.

To qualify for support, each university project must be unique, innovative and fall within research and mission areas. Partnership Awards are grants of up to \$100,000 per year for up to two years.

"It's a win-win situation," Love said. "Marshall benefits from university-led research supporting the Center's mission. And the universities gain real-world research experience, infrastructure-development opportunities, exposure to highly technical areas, the potential to publish in professional journals and the professional exposure gained from working for NASA."

The NASA Office of Equal Opportunity Programs has awarded 72 Partnership Awards this year. The 10 teams that are designated to work with Marshall have proposed projects directly related to Marshall's strategic mission.

Alabama A&M University in Normal, Ala., earned four Partnership Awards. Professors leading the teams include Dr. Goang Liaw, Dr. Maged A. Elshamy, Dr. Enoch C. Temple and Dr. Mohan D. Aggarwal.

Other university teams working with Marshall include Fisk University in Nashville, Tenn., led by Dr. Arnold Burger; North Carolina Agricultural and Technical State University in Greensboro, led by Dr. Mark J. Schulz; Southern University and A&M College at Baton Rouge, La., led by Dr. Laurence L. Henry; Southern University and A&M College System Office, led by J. Gregory Stacy; Spelman College in Atlanta, led by Dr. Beatriz H. Cardelino; and the University of Texas at El Paso, led by Dr. J.C. McClure.

Each team's progress is reviewed by NASA technical experts. Earnest C. Smith, assistant to the director of Marshall's Engineering Directorate, will work with Marshall specialists to review each university's initial proposal, identify its merits and ensure its relevance to the Center's mission.

In addition to fostering cooperation between NASA and minority institutions, Partnership Awards are designed to enhance collaborative research and educational efforts with NASA Centers, the aerospace industry, public schools and other institutions of higher education. A goal of the awards is to enhance development of a competent scientific and technical workforce of outstanding U.S. citizens.

The writer, a contractor employed by ASRI, supports the Media Relations Department.



Photo by Doug Stoffer

Ready for testing

A full-scale section of Boeing's Delta IV Heavy Lift Evolved Expendable Launch Vehicle is mounted for testing at Marshall's Antenna Test Facility. The Radio Frequency Group of Marshall's Engineering Directorate and Avionics Department is conducting communications and range safety antenna pattern measurement tests in support of a recently negotiated Space Act Agreement between Marshall and The Boeing Co.

Employees reminded to take added precautions on hot days

The high heat index of 100°F or higher experienced last week will probably occur on many days throughout the summer.

This extreme heat places employees at a higher risk of heat

This extreme heat places employees at a higher risk of heat related illnesses, such as heat exhaustion, heat cramps and even heat stroke.

For those employees whose job requires working outside, please do the following to avoid a heat related illness: 1) Wear loose-fitting, lightweight, light-colored clothing. 2) Drink plenty of liquids, preferably water. 3) Reduce your exposure time to the heat. Acclimate yourself by beginning with shorter heat exposure periods followed by gradual increases. A work and rest regimen may be alternated with longer rest periods in a cool area. 4) Reduce strenuous activity. Work loads should be increased gradually.

If you feel you are suffering from a heat-related illness, report to the Medical Center immediately or call 911. For more information regarding heat stress go to the following Website: http://www.msfc.nasa.gov/msfccwa/health/heatindex.html

August 5, 1999 MARSHALL STAR

Technical library staff ready to help with research needs

by Pamela Vaughn

If you're looking for a Sports Illustrated magazine or the latest John Grisham novel, try one of the local bookstores. But if you're looking for information contained within a particular technical document, the best and most convenient resources are in the Marshall Technical Library.

Many people on the Center may not realize there is a library on-site. Still others don't utilize the facility, perhaps because they don't know what it offers.

"It's not just a place where you come and check out a book or look at a magazine," said Deborah Wills, the librarian. "We offer other services as well. If you need help finding something, we can assist you in your search. People just don't realize there's so much available."

The library, located in G11 on the ground floor of Bldg. 4200, houses thousands of documents and publications — many of them authored by Marshall employees. Others are available on microfiche. Information ranges from the NASA engineering training collection and NASA current Formal Series (i.e., technical memorandums, special publications, conference publications, reference publications) — to documents that date back to the opening of the library in 1962.

Hard copies and microfiche are not the only ways of viewing some of these publications. Many documents may be accessed online. There are workstations available to employees who wish to do their research away from the office, but the library can be searched in the NASA GALAXIE (a catalog for other NASA Centers) and RECONplus databases from employees' office desktops.

The Technical Library has its own home page, located at: http://library.msfc.nasa.gov/library/ allowing linkup directly to the databases. Other systems, servers and databases also are linked to the site. The staff also will demonstrate how to search the different systems available. And for help from the library staff via e-mail, there's a section of the

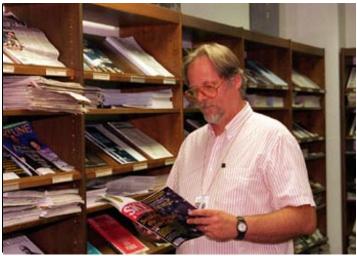


Photo by Terry Leibold

Sandy Montgomery of the Science Directorate scans one of the many periodicals offered by the Marshall Technical Library.

home page titled "Information Request."

While some documents on the Web are available in full text, "most of the older things people are looking for are not available online in full-text," said Jackie Pates, a technical information specialist. "They are identified with a citation — a title, date, report number, author — a basic bibliography. We can help you find it. If we don't have it, we'll attempt to order it through the Redstone Arsenal Library or other NASA Centers."

Other services offered by the library include a television and VCR available in a room ideal for small group meetings. It can be scheduled in advance by phoning the library. There is a short-term checkout for non-reference materials.

The library is open Monday through Friday, 7:30 a.m. to 4:30 p.m. For more information, call 544-4524 or 544-4525.

The writer, a contractor employed by Scientific and Commercial Systems Corp., is a technical writer in the Technical Illustrations and Publications Group.

Budget -

Continued from page 1

This place doesn't work as you or I think it should. Sometimes we put the cart before the horse. In a year like this, we've definitely put the cart before the horse. This year we've got the news of a budget surplus. We're making headway though with the deficit and the debt situation. Those two issues have punished NASA's budget in the past.

NASA's done a good job in the past under difficult circumstances of reassigning roles and redesigning the space station so that it's cheaper. That's the way we've survived during very difficult budget times. But when budget times are better, NASA ought to enjoy budget marks that are better.

We've tightened our belts in the appropriate way. We're not there yet, but I want to assure you with my experience and the support group we've built up, we'll survive these budget cuts. I hate that you will have to endure this anxiety for weeks, maybe months before we solve this.

I'm working on this daily, I have been and I'm in a position now to be proactive rather than reactive. I told the Marshall Center director (Art Stephenson) several months ago that I could foresee the VA/HUD bill marked up in a way we wouldn't like.

Rest assured we take it seriously. We understand the anxious impact this has on you and your families. At all times to get this news — when we've just celebrated the 30th anniversary walk on the Moon, the success of the Chandra launch and the recent mission of Columbia — this is not the time to endure this. We will correct this. In the meantime, keep your spirits up, keep up the good NASA work and I look forward to celebrating better days ahead with you.

Upcoming Events

TFAWS '99 Workshop — The Tenth Thermal & Fluids Analysis Workshop (TFAWS '99) will be held Sept. 13 through Sept. 17, at the Bevill Center in Huntsville. Marshall is hosting the event. The workshop will focus on applications of thermal and fluids analysis in the aerospace field. The workshop will bring industry, academia and government together to share information and exchange ideas about applications analysis tools and methods. To register, visit the Web at: http://tfaws99.msfc.nasa.gov

MP&M Open House — The Materials, Processes and Manufacturing (MP&M) Department is holding an open house for all Marshall employees Aug. 11 from 11 a.m.-3 p.m. at Bldg. 4707. Special demonstrations and displays will show how MP&M develops the revolutionary materials and processes and builds the flight hardware and prototypes that will take Marshall into the next generation of space flight. The tour will be centered in the Productivity Enhancement Complex, Bldg. 4707, with self-directed side trips available to Bldgs. 4711, 4705, 4605, 4623 and 4628. Department employees will answer questions and discuss topics of special interest. The purpose of this open house is to make Center employees — our primary customers aware of the full range and depth of MP&M products and services. Bus service will be available from Bldgs. 4200, 4487, 4666 and 4481 to the open house sites. Buses will circulate continuously during the event. Parking is available in the parking lots adjacent to Bldgs. 4612 and 4707. For more information, call Ed Kiessling at 544-7421 or Beth Cook at 544-2545 or visit the Web at: http:// www.ies.msfc.nasa.gov/mp/Openhouse/Default.htm

Eligibility to use Marshall Medical Center explained

A contract employee recently was bitten by fire ants. His supervisor did not allow this employee to go to the Marshall Medical Center for assistance.

Contract personnel are authorized to visit the Medical Center when they experience any work-related injury or illness or for a scheduled physical examination. Contractors who have potential adverse exposures on-the-job are provided physical exams tailored to their work environment. These potential exposures include radiation, lasers, chemicals, asbestos, noise, lead or mercury, and include occupations such as food handler, security guard, heavy equipment operator or pilot.

Contractors should not report to the Marshall Medical Center for injuries suffered off the job or when an illness is not workrelated, such as colds, flu, etc.

Civil service personnel should report to the Medical Center when they experience any work-related injury or illness or for immediate attention for minor illnesses or injuries.

Normally, patients will be given an initial dose of medication and a prescription for the rest of the required medication, when indicated. If appropriate, a patient will be advised to seek help from his or her private physician for continuing monitoring and/ or follow-up.

Civil service personnel also should report to the Medical Center when a physical examination appointment has been scheduled. Civil service personnel may be scheduled for a physical under one of two categories: a periodic examination or a monitoring/mandatory examination based on potential work exposures.

For medical emergencies, anyone can summon an ambulance by dialing 911.

UMS contract presents check to Huntsville Youth Orchestra

by Catherine Kholanjani

The Lockheed Martin Space Operations Utilization and Mission Support (UMS) contract in Huntsville, recently presented a \$2,000 check to the Huntsville Youth Orchestra in support of upcoming events planned for the orchestra's 1999-2000 season.

The Huntsville Youth Orchestra is a non-profit organization dedicated to providing youth with the opportunity to study, rehearse and perform fine music in public concerts under the direction of professional conductors. The organization does not deny participation to any child due to inability to pay membership fees. In addition, its concerts are free. Last year the orchestra supported over 120 musicians from pre-school beginners to

high school seniors from several northern Alabama and southern Tennessee counties.

Lockheed Martin's contribution will help fund two new ventures for the orchestra's 1999-2000 season. One of the projects involves performing this season's concerts at the Von Braun Center Concert Hall in downtown Huntsville. Moving the concerts to the Von Braun Center will enhance both the acoustics and the young musicians' performing experiences. The concerts are scheduled for October 17, March 19, 2000, and May 14, 2000.

The second venture Lockheed Martin Space Operations will help fund is the broadcasting of the youth orchestra's concerts on the Internet.

LiveOnTheNet.com, a Huntsville-based company, will broadcast the performances

live and on demand for several months following the concerts. Area schools will be encouraged to use the Internet concerts as part of their music curricula.

"Lockheed Martin has a vital interest in the Huntsville community, and the Huntsville Youth Orchestra helps instill confidence and discipline in the youngest members of our community," said Frank Barnes, Lockheed's program manager. "We are proud to be a sponsor of the Huntsville Youth Orchestra and these events in support of the young musicians." For more information on the concerts, call the Huntsville Youth Orchestra office at (256) 880-0622 or visit the Website at: www.hsv.tis.net/~hyo.

The writer is a human resources assistant with the UMS contract.

August 5, 1999 MARSHALL STAR

Employee Ads

Miscellaneous

- Water lily plants, \$10; Honda lawnmower, selfpropelled, bagger, \$175. 837-0085
- 1996 Old Town canoe, 16', Discovery 160K, 3 paddles, pair oars, almost new. 885-2438
- Baldwin Spinet piano, concert pitch, \$1,000. 881-0786
- Entertainment center, wood/glass, black finish; coffee table, two end tables, black lacquer, \$150 for all. 881-3527
- ★ 17" Craftsman 3.75HP tiller; 16" Craftsman chainsaw; Emerson window air conditioner. 722-4135 after 7 p.m.
- 1990 Astro bass boat, 16', 1986 Mercury 115, trolling motor, depth/fish finders, \$3,800. 721-
- Vent free, LP gas, fireplace insert, thermostat control w/blower, gas cylinder, regulator, \$1,200.
- ★ Callaway Big Bertha driver w/graphite shaft, \$100; Heavenwood w/Memphis 10 shaft, \$20; Big Bertha Clone 3-wood w/graphite shaft, \$20. 880-7305
- Black 1978 Yamaha TX500 twin street bike, \$500 obo; black Bieffe helmet, \$100. 539-1083
- Medela executive breast pump w/accessories, \$190; Dinosaur print 26"x36", blue frame; K9 cage, \$35. 880-2961
- ★ Hay, horse quality, Bermuda, square bales, \$2.50 or mulch square bales, \$2. 778-8830
- Packard Bell 486 computer, 32meg memory, 500 meg HD, software, no monitor. 837-6994
- Franklin cast iron woodburning stove, made in Alabama 1963, includes 7" vent tube, screen, original brochure, \$300. 864-0465
- John Deere Sabre riding lawn mower w/mulch kit, 15HP, 46" cut, under 15 hours, \$1,500 obo. 922-5715
- 1981 Sunline travel trailer, 21' bumper pull, sleeps 6, \$1,000. 778-9149
- Reclining exercise bike, \$50. 722-9483
- Matching crib, cradle, changing table, \$150. 650-
- Beer brewing equipment, \$75; pasta machine, \$15; espresso maker, \$15; Fisher speakers, \$15. 723-2898
- ★ Double stroller, \$30; Little Tykes vanity set, \$15; Girls 16" bike, \$20. 828-7377
- Moving sale: Couch, recliners, TV, wall clock, cameras, bicycle, record player. 931-424-8812
- ★ Ranger bass boat, trihull 16', live well, stealth

trolling motor, 88 HP Johnson motor with power tilt and trim, trailer, buddy bearings, \$2,200. (256) 505-0130.

Vehicles

- ★ 1997 Taurus SHO, automatic, CD changer, leather, moonroof, spoiler, 36K miles, \$18,000 obo. 353-6358
- ★ 1977 Ford pickup, V-8 engine, automatic, new tires, \$1,400 negotiable. 353-2147
- 1990 Mitsubishi Galant GS, 156K miles, 4-speed auto., loaded, anti-lock brakes, power sunroof, spoiler, \$3,200. 830-6826
- 1994 Mustang GT, auto., full power, 30K miles, \$11,500. 883-9340 after 5PM.
- ★ 1985 Blazer, 4WD, 5-speed, air, \$3,000 obo; 1890's Victorian parlor, 7 pieces, \$1,700. 233-4106
- 1990 Nissan Maxima, white, 5-speed, loaded, Bose sound system, 129K miles, \$5,000. 721-8099/430-3488
- 1994 Toyota T-100, towing package, bed liner, \$7,650. 657-4617
- 1997 Mazda 626LX, leather, all power, sunroof, CD cassette, security system, 28K miles, \$15,000. 881-1904
- ★ 1987 Jeep Comanche pickup w/camper shell, automatic, 4.0L, 6 cylinder, all power, \$2,900. 722-0076
- 1992 Nissan 300ZX, white, 5-speed, T-tops, 87K miles, \$12,900. 883-042

Free

- ★ Adorable puppies, 14 weeks old, miniature lab mix, all shots received, need good home. 461-
- Cocker spaniel, buff, male, age 11, neutered, shots current, good health. 851-6661

Wanted

★ Wooden student desk with drawers, good condition. 882-6808

Center Announcements

Tennis Club will host a Men's Open Doubles Tournament. The tournament starts at 8:30 a.m., with check-in and warm-up at 8 a.m. Call Jack Beasley at 544-0630 with doubles team names. Guest fee is \$3. On Aug. 14 the club will hold a

- Women's Open Doubles Tournament. The tournament starts at 8:30 a.m., with check-in and warm-up at 8 a.m. Call Amy Hemken at 544-7097 with doubles team names. Guest fee is \$3.
- Facilities Office Breakfast Facilities Office employees, retirees and friends breakfast will be held at Shoney's at University Drive and Memorial Parkway Aug. 10 at 8 a.m.
- Safety Shoe Van Monthly Visit The safety shoe van will be on-site Aug. 11, to assist civil service and contractor personnel with safety shoe needs. The mobile van will be located at the southwest end of Bldg. 4471 from 8 a.m. to 2 p.m.
- Disney Vacation Special Special T Travel of Orlando, Fla., is offering a four-day, three-night Disney/Epcot Area Hotel package especially for Marshall employees, retirees and on-site contractors for only \$169. The price includes hotel accommodations for two adults and up to two children (up to 12 years of age). Room tax is not included. To take advantage of this exclusive offer, a deposit of \$95 must be made by Aug. 27, but travel dates are good for one full year. For more information, call Special T Travel at 800-393-3191. The NASA Exchange account reference is TC-9207. Flyers are available at the Marshall Activities Building, 4752.
- MARS Luau Tickets for the MARS Ballroom Dance Club's Aug. 14 luau are available. The semi-formal event will be held at the Von Braun Center, and will feature ballroom music by The Tradewinds. Socializing will begin at 6:30 p.m., and a buffet dinner will be served at 7 p.m., followed by dancing from 8-11 p.m. Tickets, at \$19 per person with a \$3 discount for members, can be purchased from Tamara Landers at 544-6818, Pat Sage at 544-5427, Ed Ogozalek at 837-1486, Linda Kinney at 544-0563, Bob Williams at 544-3998, or Hugo Berry at 544-3525. Reservations for a table of eight can be made by calling Woody Bombara at 650-0200.

Job Opportunities

CPP 99-60-CP, Accountant, GS-510-13/14, Office of Chief Financial Officer, Accounting Operations Office. Closes Aug. 9.

Reassignment Bulletin: 99-13-CV, AST, Mission Operations Integration, GS-801-13. (2 vacancies). Flight Projects Directorate, Payload Operations and Integration Department, Payload Operations Directors Group. Closes Aug. 12.

MARSHALL STAR

Vol. 39/No. 47

Marshall Space Flight Center, Alabama 35812 (256) 544-0030

http://www.msfc.nasa.gov

The Marshall Star is published every Thursday by the Internal Relations and Communications Department at the George C. Marshall Space Flight Center, National Aeronautics and Space Administration. Contributions should be submitted no later than Monday noon to the Marshall Internal Relations and Communications Department (CD40), Bldg. 4200, room 101. Submissions should be written legibly and include the originator's name. Send electronic mail submissions to: intercom@msfc.nasa.gov The Marshall Star does not publish commercial advertising of any kind.

> Director of Internal Relations and Communications — Norman Brown Editor — Debra Valine

U.S. Government Printing Office 1999-733-111-80072

BULK RATE Postage & Fees PAID NASA Permit No. G-27